→ Scott, ...

Bruce

SCOTT
PACKAGED PRODUCTS DIVISION

Let's discuss

OLYMPIA, WA 98504

MAY 10 9 48 AM '82

May 6, 1982

CAB.

Mr. Richard Burkhalter
Department of Ecology
Industrial Section
Olympia, WA 98504

Dear Mr. Burkhalter:

On April 15, 1982, Bruce Johnson, Sam Archer, you and I met at your offices in Olympia. A number of topics were discussed and certain responses and data requested from Scott Paper Company. In reply to those requests I will summarize work completed to date and status of any projects touched upon in our discussions.

Work is on schedule to complete initial modifications to the ash clarifier and reduce levels of zinc in mill effluents in outfalls 001 and 003. The clear water recirculation pump is in place and operational. Water overflow rates have been reduced from 40 to 50 gpm to 0 to 15 gpm and continuous operation has been achieved. Further water reductions around the ash clarifier may be possible, however, changes need to be made cautiously so as not to jeopardize operation of the baghouse or cyclones.

Slag and ash from ash alley have been collected and stored since March 26. This material has been sampled in the presence of Bruce Johnson and prepared in accordance with EP toxicity sample preparation guidelines. A bioassay has been completed on this material and an LC_{50} of 1000 mg/l established. As per our agreement this material will be subjected to the EP toxicity test and the filtrate analyzed for zinc, copper, cadmium, chromium, lead, mercury and selenium.

Two other points were discussed concerning zinc and zinc toxicity. The first involved reducing all extra water into blow pit alley when ash and slag are being removed. This should help reduce the overflow of zinc contaminated solids to the boilerhouse sump and ultimately to outfalls 001 and 003. This issue is being pursued with operations to determine if it is feasible.

The second issue dealt with the use of caustic to reduce, by zinc hydroxide precipitation, the level of zinc leaving the ash clarifier. Caustic addition will be trialed after completing mechanical revisions necessary to improve clarifier performance if zinc levels continue to cause zinc toxicity in outfalls 001 and 003. An ash clarifier schematic flow diagram will be forwarded as soon as revisions are complete. Attempts will be made to indicate current flows, loadings, detention times, and a simple mass balance.

An important issue addressed at our meeting was the apparent difficulty with pH control in outfalls 001 and 003. A summary of pH violations since January 1, 1980 was reviewed. We explained the recent management reorganization and the expected positive impact on mill operations. We also described the pH task force established to address spill control and the overall adequacy of the pH control systems. This group has already been involved in planning for the upcoming shutdown.

In reviewing recent excursions of pH in outfall 003 the Benson sewer was determined to be a major contributory factor. A gate at the boilerhouse sump will be installed during the shutdown to prevent overflows of high pH material and zinc from the Benson sewer to outfall 003. We also mentioned that an additional manual caustic valve has been installed to be used whenever there is a cooking acid spill in the accumulator area.

Outfall 008 sample stabilization prior to bioassay testing was reviewed. We discussed the toxic relationship of unionized ammonia levels and pH to trout. As per our agreement we are enclosing nitrogen data for influent and effluent from the secondary treatment facility.

Successful operation of the secondary treatment facility requires a sufficient level of nutrients to sustain unhindered metabolic BOD reduction. Text book approximations of nitrogen required would be 5 parts nitrogen per 100 parts BOD in influent wastewater. In practice we observe an approximate 6 parts per 100 parts BOD demand. To satisfy demand and assure continued successful operation of secondary treatment a small amount of excess nitrogen is desirable. The target effluent ammonia nitrogen concentration in the effluent is 5 to 10 ppm.

Sincerely,

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Manager, Environmental Resources

TJB:gp